

Noatak K-12 Replacement School
Enforceable Policies Analysis

State Wide Policies

11 AAC 112.280 Transportation routes and facilities

A bridge is proposed on the downhill side of the structure to aid in sheet flow that occurs during spring breakup. The structure and out buildings will be constructed on piles to minimize the alteration in surface and groundwater drainage patterns.

This area is within the new town site location and is not a known major migratory corridor and construction should not be a disruption in foreseeable wildlife transit.

11 AAC 112.300 Habitats

The Environmental Sensitivity Index Map does not indicate any special habitats at the site. Species that may be at the site and could be impacted by construction include Arctic Hare, Ermine, Lemmings, Arctic Terns, Snowy Owls and Snow Geese; this is not a unique habitat for any of the afore mentioned animals.

Appropriate measures have been taken to minimize significant impacts to water flow and natural drainage patterns, by building a bridge on the downhill side of the school to eliminate culverts and allow free flow under buildings and off of site. There are no streams located on site; only sheet flow at breakup.

11 AAC 112.310 Air, land and water quality

The applicant proposes to use cold region construction techniques including building the school on piles and using insulation under the road and gravel pad to prevent thawing. Additionally, the tundra will be protected from gravel intrusion with geotextile laid down below the road base.

The water and sewer will be connected to the existing system and pumped within the road prism and surrounded by an insulating layer of gravel to minimize impact to the underlying permafrost.

11 AAC 112.320 Historic, prehistoric, and archeological resources

There are no known historic, prehistoric, or archeological resources at this location. Should such resources be discovered upon construction the appropriate measures will be taken.

11 AAC 112.900 Sequencing process to avoid, minimize, or mitigate

The project area is entirely underlain by permafrost. The applicant proposes to minimize adverse impacts to the maximum extent practicable by using cold region construction techniques including building the school on piles and using insulation under the road and gravel pad to prevent thawing. Additionally, the tundra will be protected from gravel intrusion with geotextile laid down below the road base.

Northwest Arctic Borough Policies

Policy 6.3.1 Subsistence

The replacement school is located away from the shoreline and in the area planned for new development. This is not the area typically used for subsistence and there is significant public need for the school.

Policy 6.3.2 Trapping

The replacement school site is located in the area planned for new development and not within traditional trapping areas.

Policy 6.3.3 Habitat and Biological Resource Protection

The planned project lies entirely within USACE jurisdictional wetlands due to the permafrost. It is on the edge of the existing village development and lies within the area planned for continued development. The applicant proposes to use technology that will guarantee the ability of the project to withstand natural- generated forces and protect the viability of biological forces by using cold region construction techniques including building the school on piles and using insulation under the road and gravel pad to prevent thawing. This construction method is designed to minimize heat transfer to the ground in order to avoid melting the permafrost and causing slumping, flooding, thermokarst, or draining. The tundra will be protected from gravel intrusion with geotextile laid down below the road base. To retain a natural drainage pattern a bridge will be constructed on the downhill side of the facility to allow sheet flow during breakup.

Policy 6.3.4 Historic, Prehistoric, and Archeological Resources

There are no known Historic, Prehistoric, or Archeological resources at this location, nor is there any thought there possibly could be any unknown sites. This is based on a review by the community during their platting work to expand the village into this area and a review of the State Historic Preservation Office records (see attached letter). Should such sites be discovered upon construction the appropriate measures will be taken.

Policy 6.3.5 Air, Land and Water Quality

This project does not directly or indirectly affect coastal resources. All hazardous and toxic materials and substances and petroleum products will be managed at the building site.

The planned development minimizes erosion by taking appropriate measures to minimize thawing of the permafrost through building on piles and insulating the road and utilities. Additionally, the flow of melt snow and ice during break up will not be significantly altered by allowing for surface flow.

6.3.6 Solid Waste Disposal

No new solid waste disposal methods are planned for this project. All existing methods of solid waste disposal will be followed.

6.3.7 Geophysical Hazards

Geophysical hazard conditions were considered in the siting and design of this project. The project site is located away from the river and the channels for break up flow have not been interrupted.

6.3.8 Coastal Development

The project is not located at the shoreline or on the waterfront.

6.3.9 Land Disposals

This policy does not apply to this project as the land is owned by the Nana Regional Corporation.

6.3.10 Transportation and Utilities

This project takes into consideration the transportation routes planned for this new development area. The planned road system and water and sewer mains are utilized to minimize duplication of transportation corridors and facilities. The new facilities are insulated to minimize thawing of the permafrost. Existing surface water movement during breakup is also protected with a bridge.

6.3.11 Energy Facilities

This policy does not apply to this project as this is not an energy development project.

6.3.12 Mining and Mineral Processing

The project will utilize existing sand and gravel pits.

6.3.13 Recreation

This project is located in a planned development area for the village and is not located in a recreation area. No impacts to recreation are expected.

6.4 Customary Use Area Policies

This project does not affect customary use areas.

6.5 Important Resource Use Area Policies

This project does not affect important resource use areas.

6.6 Sensitive Use Areas

The only sensitive use area near the project site is the Noatak River Chum Salmon Spawning Area.

6.6.7 Noatak River Chum Salmon Spawning Area

This project is located adjacent to the Noatak River Chum Salmon Spawning Area. However, the project will not directly or indirectly affect the river or spawning area and is located more than 500 feet from the ordinary high water line.